

Notice of Allowability

Application No.

09/628,135

Examiner

Tony Mahmoudi

Applicant(s)

MATSUMOTO ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed on 29-november-2004 and the amendment filed on 23-July-2004.
2. ☒ The allowed claim(s) is/are 1,3-7,9-13 and 15-19, re-numbered as claims 1-16.
3. ☒ The drawings filed on 28 July 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>12/27/04</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


CHARLES RONES
PRIMARY EXAMINER

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 29-November-2004 has been entered. In addition, the amendment filed on 23-July-2004 has been entered as the preliminary amendment to the claims.

Remarks

2. In response to the amendment filed on 23-July-2004, claims 2, 8, and 14 have been canceled and independent claims 1, 7, 13, and 19 have been amended per applicant's request. Therefore, claims 1, 3-7, 9-13, and 15-19 are pending in the application, of which, claims 1, 7, 13, and 19 are in independent form.
3. In view of the examiner's amendment, authorized by the Attorney of Record, independent claims 1, 7, 13, and 19 are amended by the examiner (details provided below.)

Examiner's Amendment

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Raymond Di Perna (Attorney of Record) on 23-December-2004 (see enclosed Interview Summary for details.)

The claims have been amended by the examiner as follows. This listing of claims will replace all prior versions, and listings of claims in the Application:

1. **(Currently Amended)** An image storage method comprising:

an image storage step, of continuously storing a plurality of image data in a first area of a single file;

a reference information storage step, of storing reference information for accessing a source outside the file, which pertains to each of the plurality of image data stored in said image storage step, in a storage order of the plurality of image data in a second area of the file,

wherein the reference information includes location information for accessing image data which is a higher resolution version of the corresponding image data stored in the first area, and

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wherein the single file stores both the plurality of image data and the reference information; and

a feature amount storage step, of assuring a third area in the file, and storing feature amount data including a plurality of components that **[[may be]] are** utilized for searching the image data stored in the first area in the storage order of the plurality of image data.

2. (Canceled)

3. (Previously Presented) The method according to claim 1, further comprising a header information storage step, of assuring a fourth area in the file, and storing header information including boundary position information between the first and second areas.

4. (Previously Presented) The method according to claim 1, wherein said image storage step includes the step of compressing and storing the plurality of image data.

5. (Original) The method according to claim 1, wherein the reference information specifies an image file name of an original of the image data stored in the first area.

6. (Previously Presented) The method according to claim 1, wherein said image storage step includes the step of storing one or a plurality of frame images extracted from moving image data in the first area, and

said reference information storage step includes the step of storing information that specifies moving image data corresponding to each frame image stored in the first area and a frame position thereof as the reference information in the second area

7. (Currently Amended) An image storage apparatus comprising:

image storage means for continuously storing a plurality of image data in a first area of a single file;

reference information storage means for storing reference information for accessing a source outside the file, which pertains to each of the plurality of image data stored by said image storage means, in a storage order of the plurality of image data in a second area of the file,

wherein the reference information includes location information for accessing image data which is a higher resolution version of the corresponding image data stored in the first area, and

wherein the single file stores both the plurality of image data and the reference information; and

feature amount storage means for assuring a third area in the file, and storing feature amount data including a plurality of components that **[[may be]] are** utilized for searching the image data stored in the first area in the storage order of the plurality of image data

8. (Canceled)

9. (Original) The apparatus according to claim 7, further comprising header information storage means for assuring a fourth area in the file, and storing header information including boundary position information between the first and second areas.

10. (Original) The apparatus according to claim 7, wherein said image storage means compresses and stores the plurality of image data.

11. (Original) The apparatus according to claim 7, wherein the reference information specifies an image file name of an original of the image data stored in the first area.

12. (Original) The apparatus according to claim 7, wherein said image storage means stores one or a plurality of frame images extracted from moving image data in the first area, and

said reference information storage means stores information that specifies moving image data corresponding to each frame image stored in the first area and a frame position thereof as the reference information in the second area.

13. **(Currently Amended)** A storage medium storing an image data file, the image data file comprising:

a first area which continuously stores a plurality of image data;

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a second area which stores reference information for accessing a source outside the file, which pertains to each of the plurality of image data stored in the first area, in a storage order of the plurality of image data,

wherein the reference information includes location information for accessing image data which is a higher resolution version of the corresponding image data stored in the first area, and

wherein the single file stores both the plurality of image data and the reference information; and

a third area which stores feature amount data including a plurality of components that **[[may be]] are** utilized for searching the image data stored in the first area in the storage order of the plurality of image data.

14. (Canceled)

15. (Original) The medium according to claim 13, wherein the image data file further comprises a fourth area which stores header information including boundary position information between the first and second areas.

16. (Original) The medium according to claim 13, wherein the image data file stored in the first area is compressed.

17. (Original) The medium according to claim 13, wherein the reference information specifies an image file name of an original of the image data stored in the first area.

18. (Original) The medium according to claim 13, wherein the first area stores one or a plurality of frame images extracted from moving image data, and the second area stores information that specifies moving image data corresponding to each frame image stored in the first area and a frame position thereof as the reference information.

19. **(Currently Amended)** A storage medium storing a control program for making a computer implement generation and storage of an image data file, said control program comprising:

code of an image storage step, of continuously storing a plurality of image data in a first area of a single file;

code of a reference information storage step, of storing reference information for accessing a source outside the file, which pertains to each of the plurality of image data stored in the image storage step, in a storage order of the plurality of image data in a second area of the file,

wherein the reference information includes location information for accessing image data which is a higher resolution version of the corresponding image data stored in the first area, and

wherein the single file stores both the plurality of image data and the reference information; and

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code of a feature amount storage, step, of assuring a third area in the file, and storing feature amount data including a plurality of components that **[[may be]] are** utilized for searching the image data stored in the first area in the storage order of the plurality of image data.

Allowance

5. Claims 1, 3-7, 9-13, and 15-19 are allowed over the prior art made of record.

6. The following is an examiner's statement of reasons for allowance:

The applicant's amendment filed on 23-July-2004, overcomes the cited prior art with respect to the independent claims, and the examiner's amendment, authorized by the attorney of record on 23-December-2004 (detailed above), overcomes the 35 U.S.C. 112, second paragraph issues with the amended independent claims.

The prior art of record, Komori (U.S. Patent No. 4,602,333), Koyama et al (U.S. Patent No. 6,424,385), Yamaguchi et al (U.S. Patent No. 4,949,287), and Kurakake et al (U.S. Patent No. 6,078,005), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claims):

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feature amount storage step, of assuring a third area in the file, and storing feature amount data including a plurality of components that are utilized for searching the image data stored in the first area in the storage order of the plurality of image data, as claimed in claims 1, 7, and 19 above.

a third area which stores feature amount data including a plurality of components that are utilized for searching the image data stored in the first area in the storage order of the plurality of image data, as claimed in claim 13 above.

Claims 3-6 are allowed over the prior art made of record because they are dependents from the allowed independent claim 1.

Claims 9-12 are allowed over the prior art made of record because they are dependents from the allowed independent claim 7.

Claims 15-18 are allowed over the prior art made of record because they are dependents from the allowed independent claim 13.

Conclusion

7. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (571) 272-4078. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (571) 272-4083.

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December 27, 2004



**CHARLES RONES
PRIMARY EXAMINER**